<u>Kindly substitute the following claims for the claims listed in the Amendment filed April 1,</u>

<u>2008:</u>

1. (currently amended) A method for sending keep-alive messages by a node to a neighbor in a

communication network, the method comprising:

<u>measuring a reliability of a communication link to the neighbor; and</u>

periodically calculating a reliability factor for communicating with a neighbor

<u>based upon the reliability of the communication link to the neighbor;</u> and

varying a frequency for sending keep-alive messages to the neighbor based upon

the reliability factor.

2. (currently amended) The method of claim 1, wherein calculating the reliability factor for

communicating with the neighbor comprises:

determining a reliability for the neighbor; and

<u>wherein the step of</u> calculating the reliability factor <u>is further</u> based upon the

reliability for the neighbor.

3. (cancelled)

4. (currently amended) The method of claim [[1]] 2, wherein calculating the reliability factor for communicating with the neighbor comprises:

determining a reliability for the neighbor;

measuring a reliability of a communication link to the neighbor;

assigning a relative weight to each of the reliability for the neighbor and the reliability of the communication link to the neighbor;

calculating the reliability factor to be a weighted average of the reliability for the neighbor and the reliability of the communication link to the neighbor.

5. (Previously Presented) The method of claim 1, wherein varying the frequency for sending keep-alive messages to the neighbor based upon the reliability comprises:

setting the frequency for sending keep-alive messages to the neighbor in inverse proportion to the reliability factor.

6. (Original) The method of claim 1, further comprising:

updating the reliability factor; and

adjusting the frequency for sending keep-alive messages to the neighbor based upon the reliability factor.

7. (Original) The method of claim 6, wherein adjusting the frequency for sending keep-alive messages to the neighbor comprises:

reducing the frequency for sending keep-alive messages to the neighbor, if the updated reliability factor represents a reliability improvement for communicating with the neighbor; and

increasing the frequency for sending keep-alive messages to the neighbor, if the updated reliability factor represents a reliability degradation for communicating with the neighbor.

8. (currently amended) A device for sending keep-alive message to a neighbor in a communication network, the device comprising:

reliability calculation logic operably coupled to <u>determine a reliability for a communication link to the neighbor and</u> periodically calculate a reliability factor for communicating with the neighbor <u>based upon the reliability for the communication link to the neighbor</u>; and

frequency variation logic responsive to the reliability calculation logic and operably coupled to calculate a frequency for sending keep-alive messages to the neighbor based upon the reliability factor.

9. (currently amended) The device of claim 8, wherein the reliability calculation logic is operably coupled to determine a reliability for the neighbor and <u>wherein</u> calculate the reliability factor <u>is further calculated using</u> based upon the reliability for the neighbor.

10. (cancelled)

11. (Previously Presented) The device of claim 8, wherein the reliability calculation logic is operably coupled to determine a reliability for the neighbor, measure a reliability for a communication link to the neighbor, assign a relative weight to each of the reliability for the neighbor and the reliability for the communication link to the neighbor, and calculate the reliability factor to be a weighted average of the reliability of the neighbor and the reliability of the communication link to the neighbor.

12. (Previously Presented) The device of claim 8, wherein the frequency variation logic is operably coupled to set the frequency for sending keep-alive messages to the neighbor in inverse proportion to the reliability factor.

13. (Previously Presented) The device of claim 8, wherein the reliability calculation logic is operably coupled to update the reliability factor, and wherein the frequency variation logic is operably coupled to adjust the frequency for sending keep-alive messages to the neighbor based upon the updated reliability factor.

14. (Previously Presented) The device of claim 13, wherein the frequency variation logic is operably coupled to reduce the frequency for sending keep alive messages to the neighbor if the updated reliability factor represents a reliability improvement for communicating with the

neighbor and increase the frequency for sending keep-alive messages to the neighbor if the updated reliability factor represents a degradation for communicating with the neighbor.

15. (currently amended) A program product comprising a computer readable medium having embodied thereon a computer program for sending keep-alive messages to a neighbor in a communication network, the computer program comprising:

reliability calculation logic operably coupled to measure a reliability for a communication link to the neighbor and to periodically calculate a reliability factor for communicating with the neighbor based upon the reliability for the communication link to the neighbor; and

frequency variation logic responsive to the reliability calculation logic and operably coupled to determine a frequency for sending keep-alive messages to the neighbor based upon the reliability factor.

16. (Previously Presented) The program product of claim 15, wherein the reliability calculation logic is programmed to determine a reliability for the neighbor and calculate the reliability factor based upon the reliability for the neighbor.

17. (cancelled)

18. (Previously Presented) The program product of claim 15, wherein the reliability calculation logic is programmed to determine a reliability for the neighbor, measure a reliability for a communication link to the neighbor, assign a relative weight to each of the reliability for the neighbor and the reliability for the communication link to the neighbor, and calculate the reliability factor to be a weighted average of the reliability of the neighbor and the reliability of the communication link to the neighbor.

19. (Previously Presented) The program product of claim 15, wherein the frequency variation logic is programmed to set the frequency for sending keep-alive messages to the neighbor in inverse proportion to the reliability factor.

20. (Previously Presented) The program product of claim 15, wherein the reliability calculation logic is programmed to update the reliability factor, and wherein the frequency variation logic is operably coupled to adjust the frequency for sending keep-alive messages to the neighbor based upon the updated reliability factor.

21. (Previously Presented) The program product of claim 15, wherein the frequency variation logic is programmed to reduce the frequency for sending keep alive messages to the neighbor if the updated reliability factor represents a reliability improvement for communicating with the neighbor and increase the frequency for sending keep-alive messages to the neighbor if the updated reliability factor represents a degradation for communicating with the neighbor.

22. (currently amended) A communication system comprising a plurality of interconnected

devices including a node and a neighbor in communication over a link, wherein the node is

operably coupled to send keep-alive messages to the neighbor, and wherein the node is operably

coupled to vary the frequency for sending keep-alive messages to the neighbor based upon a

periodically computed reliability factor for communicating with the neighbor over the

communication link, wherein the node is operably coupled to calculate the reliability factor

based upon a reliability for the neighbor and a measured reliability for the communication link.

23. (cancelled)

24. (previously presented) The communication system of claim 22, wherein the node is operably

coupled to set the frequency for sending keep-alive messages to the neighbor in inverse

proportion to the reliability factor.

25. (previously added) The method of claim 4, wherein the reliability factor (RF) is calculated

using the below equation, where A is the measured reliability of the communication link to the

neighbor, B is the determined reliability of the neighbor, W1 is a relative weight for A and W2 is

a relative weight for B:

$$RF = (W1*A + W2*B).$$

26. (previously added) The device of claim 11, wherein the reliability factor (RF) is calculated

using the below equation, where A is the measured reliability of the communication link to the

neighbor, B is the determined reliability of the neighbor, W1 is a relative weight for A and W2 is

a relative weight for B:

$$RF = (W1*A + W2*B).$$